



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** T. Maruta, N. Nakamura

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**FROM:** J. Dahlberg

**Checked:**

**# :** C1231

**DETAILS:**

Data: Fiduc\HallC\HES\_HKS\HKS\Splitter\090506a

Below are the results of the HKS slit box calibration survey performed on May 06, 2009. The coordinate system (in millimeters), is based on the ideal beam into the HKS spectrometer Q1. Along beam, the Z=0 is at the downstream end of the splitter flange. A +X is to the beam left, a +Z is downstream, and a +Y is up.

At encoder 160.309, sieve slit: Pitch = +0.117° Yaw = +0.061° Roll = +0.403°  
 At encoder 360.901, large aperture: Pitch = +0.197° Yaw = +0.083° Roll = +0.281°

LOCATION	Z	X	Y	ENCODER
Sieve top center hole	172.35	-1.85	-98.10	HOME
Sieve bot center hole	172.47	-1.80	-80.98	144.127
Sieve br center hole	172.41	-83.07	-16.79	144.127
Sieve bl center hole	172.28	62.54	-15.91	144.127
Sieve center hole	172.34	-2.24	-16.35	144.127
Sieve bot center hole	172.43	-1.92	-55.27	169.509
Sieve br center hole	172.38	-83.20	8.95	169.509
Sieve top center hole	172.16	-2.66	74.13	169.509
Sieve bl center hole	172.23	62.41	9.77	169.509
Sieve center hole	172.30	-2.32	9.41	169.509
Sieve center hole	172.24	-2.42	40.38	200.018
Top inside edge Lg aperture	172.54	0.00	-87.66	200.018
Sieve bot center hole	172.05	-2.54	107.54	330.050
Lg aperture center	172.52	-7.36	-31.07	330.050
Lg aperture center	172.48	-7.40	-15.92	345.012
Lg aperture center	172.43	-7.52	3.96	364.586
Lg aperture top bl corner	172.04	73.01	79.91	364.586
Lg aperture top br corner	172.29	-88.86	79.09	364.586
Lg aperture bot bl corner	172.57	73.76	-71.19	364.586
Lg aperture bot br corner	172.82	-88.15	-71.97	364.586
Sieve top center hole	172.38	-1.84	-98.27	HOME
Sieve bot center hole	172.49	-1.82	-71.31	153.798
Sieve br center hole	172.45	-83.10	-7.09	153.798
Sieve top center hole	172.24	-2.57	58.09	153.798
Sieve bl center hole	172.29	62.48	-6.28	153.798
Sieve center hole	172.36	-2.22	-6.64	153.798
Lg aperture center	172.46	-7.58	0.13	360.901
Lg aperture top bl corner	172.09	73.00	76.10	360.901
Lg aperture top br corner	172.32	-88.87	75.31	360.901
Lg aperture bot bl corner	172.60	73.75	-74.97	360.901
Lg aperture bot br corner	172.84	-88.14	-75.76	360.901
Sieve bot center hole	172.47	-1.74	-64.58	160.309
Sieve br center hole	172.43	-83.02	-0.35	160.309
Sieve top center hole	172.21	-2.65	64.67	160.309
Sieve bl center hole	172.27	62.41	0.32	160.309
Sieve center hole	172.34	-2.29	-0.07	160.309